IN THE CLAIMS

1. A data storing device comprising:

a housing including first and second opposed portions;

an integrated circuit coupled to the first portion of the housing, the integrated circuit including a random access memory;

a battery supported by the first portion of the housing and having first and second terminals, the first terminal being coupled to the integrated circuit; and

connection circuitry coupling the second terminal of the battery to the integrated circuit to complete a circuit, the connection circuitry including a conductor supported by the second portion of the housing and movable with the second portion of the housing.

2. A data storing device in accordance with claim 1 wherein the battery is a thin film battery.

3. A data storing device according to claim 1, wherein the conductor completes a circuit and supplies electrical power to the memory when the first and second portions of the housing are sealed together and does not complete the circuit or supply electrical power to the memory when the first and second portions are not sealed together.

4. A data storing device according to claim 1, wherein the conductor completes a circuit and supplies electrical power to the memory when the first and second portions of the housing are coupled together and does not complete the circuit or supply electrical power to the memory when the first and second portions are not coupled together.

5. A data storing device according to claim 1, wherein the first and second portions of the housing hermetically seal the integrated circuit and the battery.

6. A data storing device according to claim 1, wherein the first and second portions of the housing hermetically seal the integrated circuit and the battery when the first and second portions of the housing are mated together, and wherein the conductor completes a circuit and supplies electrical power to the memory when the first and second portions of the housing are mated together and does not complete the circuit or supply electrical power to the memory when the first and second portions are not mated together.

7. (once amended) A data storing device comprising:

a housing defined by first and second housing portions, the second housing portion being movable relative to the first housing portion between mated and open positions;

an integrated circuit supported by the first housing portion;

a battery in the housing; [and]

a conductor supported by and movable with the second housing portion, the conductor coupling the battery to the integrated circuit when the second housing portion is in the mated position; and

wherein the first and second housing portions enclose and hermetically seal the integrated circuit and the battery when the first and second housing portions are in the mated position.

8. A data storing device in accordance with claim 7 wherein the integrated circuit comprises a static random access memory.

9. A data storing device in accordance with claim 7 wherein the integrated circuit includes a memory and a microprocessor, and wherein the conductor couples the battery to the integrated circuit.

10. A data storing device in accordance with claim 7 wherein the integrated circuit includes a memory and a microprocessor, wherein the memory is a static random access memory, and wherein the conductor couples the battery to the integrated circuit so that the integrated circuit is powered by the battery, thereby resulting in the static random access memory being powered by the battery.

11. A data storing device in accordance with claim 7 wherein the battery comprises a thin film battery

12. A data storing device in accordance with claim 7 wherein the housing has a thickness of about 0.03 inches.

13. A data storing device in accordance with claim 7 wherein the integrated circuit includes a memory, an RF transmitter, and a microprocessor, wherein the memory is a static random access memory, and wherein the conductor couples the battery to the integrated circuit so that the integrated circuit is powered by the battery, thereby resulting in the static random access memory being powered by the battery.

14. A data storing device in accordance with claim 7 wherein the integrated circuit includes a memory, a microwave transmitter, a microwave receiver, and a microprocessor, wherein the memory is a static random access memory, and wherein the conductor couples the battery to the integrated circuit so that the integrated circuit is powered by the battery, thereby resulting in the static random access memory being powered by the battery.

15. A data storing device in accordance with claim 7 and further comprising conductive epoxy coupling the battery to the integrated circuit.

Claim 16 (canceled)

17. A data storing device according to claim 7, wherein the conductor does not supply electrical power to the integrated circuit when the first and second housing portions are not in the mated position.

18. A data storing device according to claim 7, wherein the conductor completes a circuit and supplies electrical power to the integrated circuit when the first and second portions of the housing are sealed together and does not complete the circuit or supply electrical power to the integrated circuit when the first and second portions are not sealed together.

19. (twice amended) A portable data storing device comprising:

a housing defined by first and second housing portions each including planar surfaces;

an integrated circuit including a static random access memory configured to store the data, the integrated circuit being supported from the first housing portion;

a thin film battery in the housing; [and]

a conductor supported by and movable with the second housing portion, the conductor coupling the battery to the integrated circuit so that the integrated circuit is powered by the battery when the first and second portions are mated and thereby resulting in the static random access memory being powered by the battery and so that the integrated circuit is not powered by the battery when the first and second portions are not mated; and

wherein the conductor completes a circuit and supplies electrical power to the integrated circuit when the first and second portions of the housing are sealed together and does not complete the circuit or supply the electrical power to the integrated circuit when the first and second portions are not sealed together.

20. The portable data storing device of claim 19, wherein the integrated circuit further comprises a microprocessor, a spread spectrum RF transmitter controlled by the microprocessor, an RF receiver controlled by the microprocessor.

21. A portable data storing device in accordance with claim 19 wherein the housing has a thickness of about 0.03 inches.

22. A portable data storing device in accordance with claim 19 and further comprising conductive epoxy electrically coupling the battery to the integrated circuit.

23. A portable data storage device comprising:

a first housing member;

an antenna formed on the first housing member;

a second housing member configured to be mated to the first housing member;

a first battery disposed between the first and second housing members, a first electrode of the first battery contacting a first power conductor on the first housing member;

a second battery disposed between the first and second housing members, a first electrode of the second battery contacting a second power conductor on the first housing member

an integrated circuit disposed on a side of the first housing member configured to be mated to the second housing member; and

a conductor formed on the second housing member, the conductor coupling the first and second batteries in series and supplying electrical power to the integrated circuit when the second housing member is mated to the first housing member and not coupling the first and second batteries in series or supplying electrical power to the integrated circuit when the second housing member is not mated to the first housing member.

24. The portable data storage device of claim 23, wherein the integrated circuit further comprises a microprocessor, a RF transmitter controlled by the microprocessor, an RF receiver controlled by the microprocessor and a static random access memory coupled to the microprocessor and configured to store the data, the RF transmitter and RF receiver being operatively coupled to the antenna.

25. (once amended) A portable data storing device comprising:

a housing defined by first and second housing portions each including planar surfaces~ an integrated circuit including a random access memory configured to store the data, the integrated circuit being supported from the first housing portion; a thin film battery in the housing:

a conductor supported by and movable with the second housing portion, the conductor coupling the battery to the integrated circuit so that the integrated circuit is powered by the battery when the first and second portions are mated and thereby resulting in the memory being powered by the battery and so that the integrated circuit is not powered by the battery when the first and second portions are not mated: and

wherein the conductor completes a circuit and supplies electrical power to the integrated circuit when the first and second housing portions of the housing are sealed together and does not complete the circuit or supply electrical power to the integrated circuit when the first and second portions are not sealed together.

26. (once amended) A passive radio frequency identification device comprising:

a first flexible film having a peripheral portion;

a second flexible film laminated directly to the peripheral portion of the first flexible film;

a first dipole antenna disposed directly on the first film; and

a single integrated circuit having substantially all circuitry formed on a surface of the integrated circuit facing the first film, the integrated circuit being coupled to the first dipole

antenna and including memory to store an identification number, a receiver coupled to the first dipole antenna to receive and decode data from a spread spectrum signal in the range of approximately 200MHz to 100Hz, control logic to perform a comparison between the received data and at least a portion of the identification number, and a transmitter coupled to the first dipole antenna to transmit a response based on the comparison.

27. The radio frequency identification device of claim 26, further comprising an adhesive backing to affix the circuit to a surface.

28. The radio frequency identification device of claim 26, further comprising a second dipole antenna coupled to the integrated circuit and disposed between the first and second films, wherein the first and second dipole antennas are approximately perpendicular to each other in a generally X-shaped configuration.

29. The radio frequency identification device of claim 26, wherein the first dipole antenna comprises a printed conductive ink or epoxy.

30. The radio frequency identification device of claim 26, wherein only two terminals connect off-chip components to the integrated circuit.

31. The radio frequency identification device of claim 26, further comprising a printed label adhered to the first flexible film.

32. The radio frequency identification device of claim 26, wherein the package is bar coded.

Claims 33 to 63 (canceled)

64. The radio frequency identification device of claim 26, wherein the second flexible film has a peripheral portion which is laminated directly to the peripheral portion of the first flexible film to form an approximately hermetically sealed flexible package, and wherein the first dipole antenna is disposed between the first and second films, and wherein the single integrated circuit is disposed between the first and second films, and wherein the integrated circuit is coupled to the first dipole antenna using a conductive epoxy.

65. A passive radio frequency identification device comprising:

a first flexible plastic film having a first surface upon which a first dipole antenna is directly disposed, wherein the first surface comprises a peripheral region at least partially surrounding the first antenna;

a second flexible material haying a second surface laminated directly to the peripheral region of the first surface; and

a single integrated circuit coupled to the first antenna and including memory to store a value, a receiver coupled to the first antenna to receive and decode data from an RF signal in the range of 800MHz to 80GHz, control logic to make a comparison between the data and the value, and a transmitter coupled to the first antenna to provide a response based on the comparison.

66. The device of claim 65, further comprising a second dipole antenna coupled to the integrated circuit and disposed between the first film and the second material, wherein the first and second dipole antennas are approximately perpendicular to each other where they cross.

67. The device of claim 65, wherein only two terminals connect off-chip components to the integrated circuit.

68. The device of claim 65, further comprising an adhesive backing to affix the device to a surface.

69. The device of claim 66, further comprising a printed label.

70. The device of claim 69, further comprising a bar code.

71. (once amended) The device of claim 65, wherein the control logic is configured to store information received by the receiver into the memory.

Claims 72 to 81 (canceled)